



# ***Sierra Army Depot***

## ***ISO 14001***

### ***Environmental Management System (EMS) Awareness Training***



***~ protecting our environment is  
everyone's responsibility ~***





# ***Executive Order 13423***

***signed 01/24/2007, from the President of the  
United States***

Sec. 3. *Duties of Heads of Agencies.* In implementing the policy set forth in this order, **the head of each agency shall:**

- (b) implement within the agency **environmental management systems (EMS)** at all appropriate organizational levels to ensure
  - (i) use of EMS as the **primary *management* approach for addressing environmental aspects** of internal agency operations and activities...,
  - (ii) **establishment of agency objectives and targets** to ensure implementation of this order, and
  - (iii) collection, analysis, and reporting of information to **measure performance** in the implementation of this order.



# ***ISO 14001 Overview***

ISO 14001 is an internationally accepted standard that defines the requirements for establishing, implementing and operating an Environmental Management System.

An Environmental Management System (EMS) is a framework that allows an organization to consistently **control its significant impacts** on the environment, **reduce the risk of pollution** incidents, **ensure compliance** with relevant environmental legislation and **continually improve** its processes and operations.



# 14001 Certification Benefits



- Reduces resource use like energy, water, etc.
- Reduces waste disposal costs and problems
- Reduces pollution
- Continual Improvement
- Getting recognition as a “green” company on a domestic and international level – gives competitive advantage
- Drives performance improvement and improves efficiency
- Ensuring compliance to legal requirements
- Reduces liability
- Potentially saves SIAD from paying heavy legal penalties







# ***Sierra Army Depot Environmental Policy 200-2 (paraphrased)***

SIAD is committed to leadership and stewardship in **protection of the environment and workplace safety, based on continual improvement, sustainability, hazard identification and control (aspect and impact identification), and pollution prevention.**

SIAD **complies with federal, state, and local regulations** in addition to other requirements. SIAD **reviews environmental objectives and targets annually** or when new types of work are received.

SIAD conducts operations in a manner which **protects the community and minimizes or prevents adverse impact to environmental media** through environmental controls. The installation protects its workers through hazard identification, risk assessment and implementation of risk controls.



# ***ISO 14001 Requirements***

## **PLAN**

- 4.2 Environmental Policy**
- 4.3.1 Environmental Aspects**
- 4.3.2 Legal and Other Requirements**
- 4.3.3 Objectives, Targets and Programs**

## **DO**

- 4.4.1 Resources, Roles, Responsibility and Authority**
- 4.4.2 Competence, Training and Awareness**
- 4.4.3 Communication**
- 4.4.4 Documentation**
- 4.4.5 Control of Documents**
- 4.4.6 Operational Control**
- 4.4.7 Emergency Preparedness and Response**

## **CHECK**

- 4.5.1 Monitoring and Measurement**
- 4.5.2 Evaluation of Compliance**
- 4.5.3 Nonconformity, Corrective Action and Preventive Action**
- 4.5.4 Control of Records**
- 4.5.5 Internal Audit**

## **ACT**

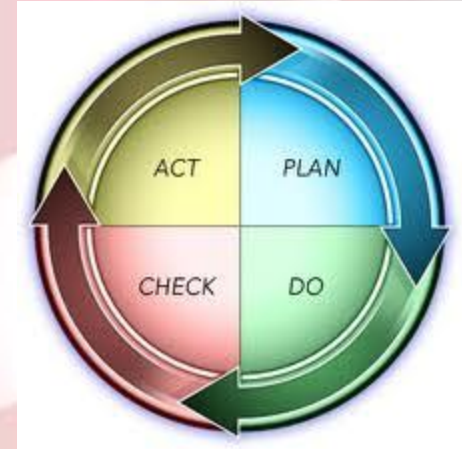
- 4.6 Management Review**



# EMS OVERVIEW



- “**Plan**” what you will Do
- “**Do**” according to your Plan
- “**Check**” to see if what you did worked
- “**Act**” to change or improve the part of your Plan or Do that did not give you the results you intended
- **Key Concept of ISO 14001:** “Say what you do, Do what you say, and document what you did!” If you do not document it, it did not happen.





# ***Environmental Aspects and Impacts Definitions***

- ❑ **Environment:** Surroundings in which an organization operates and has influence on, including air, water, land, natural resources, flora, fauna, humans, and their relation.
- ❑ **Environmental Aspect: (WHAT)** element of an organization's activities, products or services that can interact with the environment.
- ❑ **Environmental Impact: (HOW)** any element can change the environment, whether adverse or beneficial, resulting from an organization's activities, products or services.





# ***Environmental Aspects and Impacts Examples***

***Everybody at SIAD has a role and responsibility managing the EMS program. Ensure you perform tasks in an environmentally safe manner!***

- ☐ **Environmental Aspects:** Recyclables (paper, toner cartridges, lead acid batteries, etc.); hazardous materials (oil, fuels, paints, etc.); hazardous waste; utilities (turning off lights, electricity conservation, water conservation, etc.).
- ☐ **Environmental Impacts:** Solid waste going to the landfill (soil), hazardous material/waste spills (soil, groundwater), emissions (air).





# ***Environmental Aspect and Impact Examples***

- Hazardous materials in storage, flammable storage cabinets, etc.
- Calibration of measuring, weighing and monitoring equipment. Equipment not operating properly may have an adverse impact.
- Hazardous waste is an environmental aspect that would be an environmental impact if spilled or released and would be a nonconformance if not labeled, improperly labeled or improperly stored.
- Paint / Blast booth filter changes are environmental aspects because they minimize air emissions.



# ***Significant Environmental Aspect Areas***

***Drinking Water  
Hazardous Waste Management  
Equipment Painting***

## **Big 9 - Potential Significant Environmental Aspect Areas**

**Paint/Blast Booths (Air Emissions)**

**Hazardous Material / Igloo Area**

**Facilities and Equip. Maintenance**

**Recycling**

**Fire Department**

**Tactical Vehicle Storage area**

**Base Support Shops**

**DOIM (Information)**

**Hazardous Waste 90-Day Area Storage Facility**





# ***Objectives, Targets and Programs Definitions***

***Systematic process to achieve continual improvement.***

- ☐ ***Environmental Objective:*** *An environmental goal to be achieved, consistent with the environmental policy.*
- ☐ ***Environmental Target:*** *Detailed measurable performance requirement to be met in order to achieve the Environmental Objectives.*





# ***FY14 Objectives and Targets for Significant Aspects***

## **Drinking Water**

### **Objective:**

Increase consumer confidence in SIAD's drinking water quality.

### **Target:**

Increase consumer confidence by 10% by end of FY15 based on initial baseline survey conducted in FY13.

## **Hazardous Waste**

### **Objective:**

Reduce hazardous waste generated by SIAD activities through diversion to recycling programs.

### **Target:**

Reduce overall hazardous waste generation by 15% during FY14 using hazardous material recycling programs.



# ***FY14 Objectives and Targets for Significant Aspects***



## **Equipment Painting**

### **Objective:**

Reduce air emissions - volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) generation produced from painting activities.

### **Target:**

Reduce VOCs by 2.0% and by 30 Sep 2014.



## ***4.4.1 Resources, Roles, Responsibility and Authority***

SIAD Top Management has appointed the **Garrison Manager as the Environmental Management Representative (EMR)** with the responsibility and authority to ensure:

- Environmental management system requirements are established, implemented and maintained in accordance with ISO 14001 international standards.
- Reporting to Top Management on the performance of the environmental management system for review including recommendations for improvement.



## ***4.4.5 Control of Documents***



- Must establish, implement and maintain a procedure to
  - Review and update documents (SOPs, Desk Guides, etc.) as necessary and re-approve
  - Current versions are available at points of use
  - Documents remain legible
  - Documents of external origin are identified and controlled
  - Prevent unintended use of obsolete documents, and apply suitable identification if retained





## 4.4.6 Operational Control



### **Plan and carry out processes to prevent and minimize impacts to the environment**

- Each organization must establish, implement and maintain documented procedures (SOPs, Desk Guides, etc.) to control situations where the lack of documented procedures could lead to deviations and nonconformities
- Procedures must include steps to identify and control environmental impacts of the organizations activities
- Procedures and requirements must be communicated to suppliers and contractors





## ***4.4.7 Emergency Preparedness and Response***

### **Procedures for identifying and managing emergencies that can have environmental impacts**

- Establish, implement and maintain procedures to identify potential emergency situations and accidents
- Respond to actual emergency situations and accidents, and prevent or control adverse environmental impacts
- Review and revise procedures, especially after an accident or emergency occurs
- Periodically test procedures
- Document and critique test





## 4.4.7 Emergency Preparedness and Response – Post the current Spill Procedures card at work areas and at all hazardous waste accumulation areas



### SPILL PROCEDURES



In the event of a spill of any amount of chemicals, petroleum products, hazardous material, or residues from process operations, paint operations, etc., the following actions shall be taken by the individual causing, witnessing, or discovering the spill:

1. Evacuate personnel from the immediate area as necessary.
2. Notify Security by calling: **911**
3. Security will then notify the following in the order listed:

<b>Fire Department</b>	<b>x4911</b>	<b>-or-</b>	<b>x4309</b>
<b>Safety</b>	<b>x4234</b>		
<b>Environmental</b>	<b>x4381</b>	<b>-or-</b>	<b>x4235 -or- x4622</b>



4. Non-emergency spills, call: **x4381 -or- x4235 -or- x4622**
5. **If it is safe to do so and within your level of training**, stop the spill from spreading by:
  - closing any open valves or levers, or;
  - berming the spill with absorbent material, spill socks, spill dikes, or soil.

❖ Contact Environmental for any information or assistance completing your mission in an environmentally safe manner.

530-827-4381	x4381	Environmental Protection Specialist
530-827-4235	x4235	Hazardous Waste Program Manager
530-827-4622	x4622	Chief, Environmental

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# ***Nonconformity, Corrective Action and Preventive Action Definitions***

**Systematic approach to identifying problems**

- **Nonconformity** - non-fulfillment of a requirement
- **Corrective action** - action to eliminate the cause of a detected nonconformity
- **Preventive action** - action to prevent the cause of a potential nonconformity

**Your Role! Self identify problems, document them and correct them in a manner so they will not occur again**





# ***Examples of Environmental Concerns***

- ☐ What do you do and who do you call in case of a spill of Hazardous Material or Hazardous Waste?
- ☐ I have an expired can of Hazardous Material, what should I do with it? You need to know where your waste accumulation area is located!
- ☐ What should I do with Hazardous Wastes?
- ☐ Do I have a SOP, LOI or JHA for my process or operation? If not, why not? Does the procedure include steps to control environmental impacts?



# ***Environmental Management Team***

- ☐ Environmental Management Representative (EMR)/Garrison Manager
- ☐ EMS Team Leader/Environmental Chief
- ☐ EMS/ISO 14001 Coordinator
- ☐ Environmental Protection Specialists
- ☐ Department Level Supervisors



***Remember...***

***PROTECTING OUR ENVIRONMENT  
IS EVERYONE'S RESPONSIBILITY***

***Questions/Comments?***

